

WHAT IS CLAIMED IS:

1. A method of manufacturing a fiber-reinforced article having at least first and second mats of fiber material, the method comprising overlapping edges of the first and second mats, modifying at least one of the overlapping edges so as to improve a flow of liquid from the first mat to the second mats through the overlapping edges, applying a liquid to the first mat so as to cause the liquid to flow through the first mat, through the overlapping edges, and into the second mat, and causing the liquid to harden.
2. The method according to Claim 1, wherein modifying comprises removing at least a portion of an outer layer of one of the first and second mats in the vicinity of the overlapping edges.
3. The method according to Claim 1, wherein modifying comprises removing an outer layer of portions of both the first and second mats which define the overlapping edges.
4. The method according to Claim 1, wherein modifying comprises removing a strip of an outer layer of both of the first and second mats, so as to define first and second channels in the first and second mats.
5. The method according to Claim 4, wherein the step of overlapping edges comprises positioning the first and second channels to face each other.
6. The method according to Claim 1 additionally comprising stitching the overlapping edges together.
7. The method according to Claim 1, wherein modifying comprises providing a passage extending from an inner layer of the first mat, through an outer layer of the first mat, through an outer layer of the second mat, and into an inner layer of the second mat.
8. The method according to Claim 7, wherein providing a passage comprises inserting a tube through the overlapping edges.
9. The method according to Claim 8, wherein inserting a tube comprises inserting a flexible tube through the overlapping edges and aligning a first aperture in the tube with the inner layer of the first mat, and aligning a second aperture of the tube with the inner layer of the second mat.
10. A method of manufacturing a fiber-reinforced article having at least one multi-layered mat of fiber material, the method comprising placing the mat in a mold, applying flow guiding members to the mat, pressing the mat and guiding members between dies of the mold, and moving resin into the mat.

11. The method according to Claim 10 further comprising pressing the mat and guiding members with the dies until the at least one of the guide members ruptures.

12. The method according to Claim 10, wherein applying comprises placing the flow guiding members on an outer layer of the mat, wherein the flow guiding members are sized so as to compress the mat sufficiently to restrict a flow of resin through the mat in the vicinity of the flow guiding members.

13. The method according to Claim 10, wherein applying comprises forming a labyrinth flow path with the flow guiding members in a portion of the mat which extends generally horizontally.

14. The method according to Claim 10, wherein applying comprises forming a vertical flow path with the flow guiding members in a portion of the mat which extends generally vertically.

15. The method according to Claim 14, wherein applying further comprises forming a labyrinth flow path with the flow guiding members in a portion of the mat which extends generally horizontally and connecting the labyrinth flow path with the vertical flow path.

16. The method according to Claim 10, wherein placing the mat in a mold comprises placing a mat having at least two outer layers and at least one inner layer, wherein the outer layers generate a higher resistance to a flow of resin than the inner layer.

17. A fiber reinforced article comprising first and second mats of multi-layered fiber reinforcing material, the mats having first and second edges respectively, the first and second edges being overlapped, a resin material impregnated into the first and second mats, wherein at least one of the first and second edges include a modification to improve a flow of resin from the first edge to the second edge.

18. The fiber reinforced article according to Claim 17, wherein each of the first and second mats comprise at least two outer layers and at least one inner layer, the outer layers providing a higher resistance to a flow of liquid resin than the inner layer.

19. The fiber reinforced article according to Claim 17, wherein the modification comprises a portion of an outer layer of the first edge having been removed.

20. The fiber reinforced article according to Claim 19, wherein the modification comprises a portion of an outer layer of the second mat having been removed.

21. The fiber reinforced article according to Claim 20, wherein the modification further comprises stitches extending through the overlapped first and second edges.

22. The fiber reinforced article according to Claim 17, wherein the modification comprises a tube extending through the overlapped edges.

23. The fiber reinforced article according to Claim 22, wherein the tube comprises a flexible member.

24. The fiber reinforced article according to Claim 12, wherein the tube includes at least a first aperture exposed to an inner layer of the first mat and a second aperture exposed to an inner layer of the second mat.

25. A fiber reinforced article comprising at least one mat of multi-layered fiber reinforcing material, at least one flow guiding member applied to the mat so as to define a modified flow path of liquid resin through the mat, and a hardened resin impregnated into the mat.

26. The fiber reinforced article according to Claim 25, additionally comprising a plurality of flow guiding members defining a labyrinth flow path for liquid resin.

27. The fiber reinforced article according to Claim 26, wherein the labyrinth flow path extends through a portion of the mat which was generally horizontally extending when the resin was in a liquid form and was moved into the mat during a molding process.

28. The fiber reinforced article according to Claim 25, additionally comprising a plurality of flow guiding members which defined a generally vertical flow path for liquid resin when the resin was in a liquid form and was moved into the mat.